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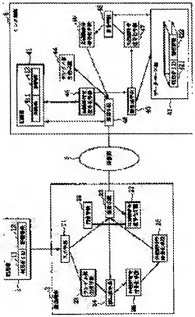
(54) METHOD FOR USER AUTHENTICATION/KEY SHARING

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a user authentication/key sharing method by which user authentication and key sharing can be conducted through a communication network where interception and pretence may be in existence without the need for provision of a privately shared key and a private key encrypted by a public key to users and communication terminals or for installation of an authentication station.

SOLUTION: A communication terminal 2 uses a public key 411 adopting a public key encryption received from a center device 4 to encrypt a user ID, transmits the encrypted ID to the center device 4, the center device 4 retrieves private information (password or the like) on the basis of the encrypted user ID, generates a key adopting a common key encryption between the communication terminal 2 and the center device 4 on the basis of private information 12 entered to the communication terminal 2 by a user, or private information 422 retrieved by the center device 4, a random value generated by the communication terminal 2 and a random value generated by the center device 4, encrypts the user ID and the private information by using the shared key, the communication terminal 2 transmits the result to the center device 4, where combination between the user ID and the private information is collated for authentication.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